(No Model.)

2 Sheets—Sheet 1.

R. LEDIG.

BEER COOLER.

No. 493,383. Patented Mar. 14, 1893.

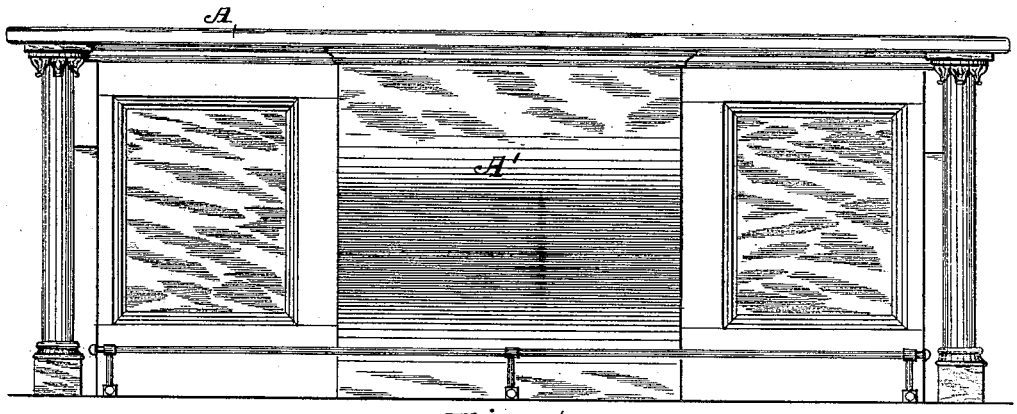

Fig. 1

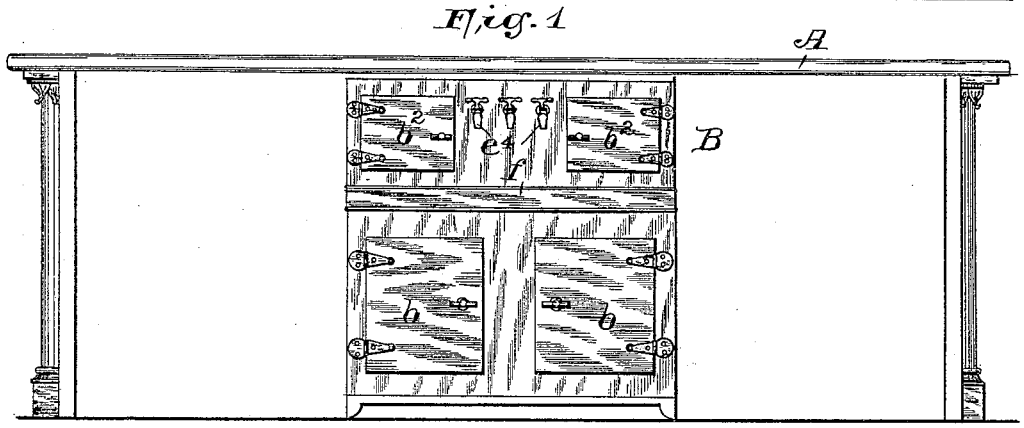

Fig. 2

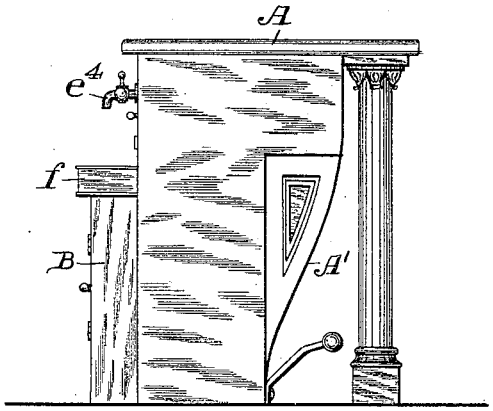

Fig. 3

WITNESSES:

Wm H Caulfield Jr

G. Basil Hooper

INVENTOR:

Rudolph Ledig,

BY Fred'k C. Faentzel, ATT'Y.

(No Model.)

2 Sheets—Sheet 2.

R. LEDIG.

BEER COOLER.

No. 493,383. Patented Mar. 14, 1893.

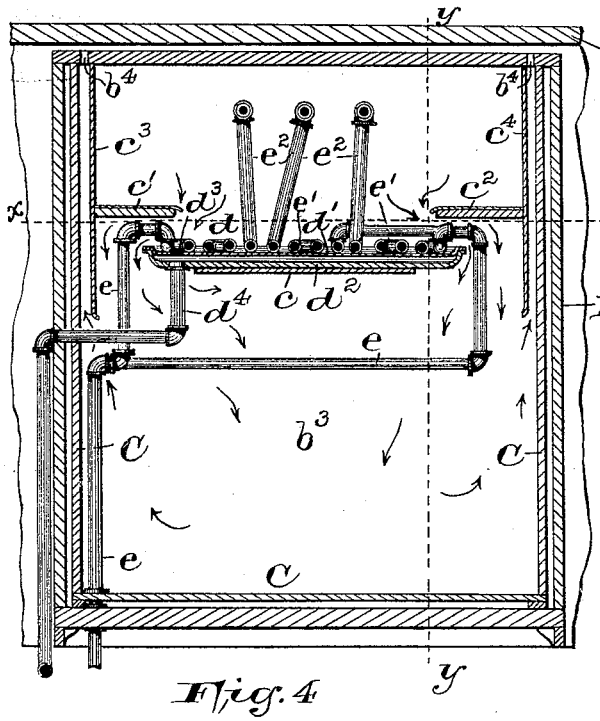

Fig. 4

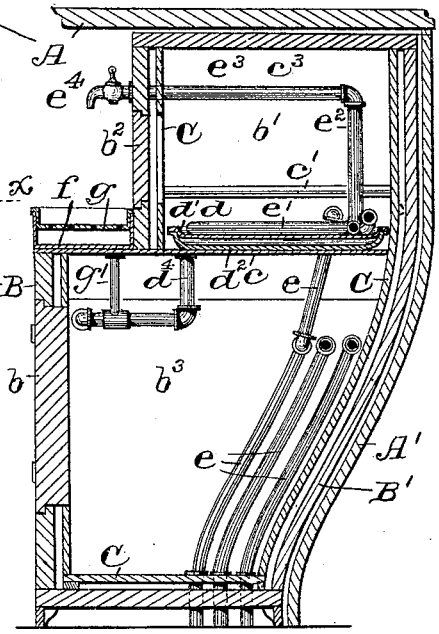

Fig. 5

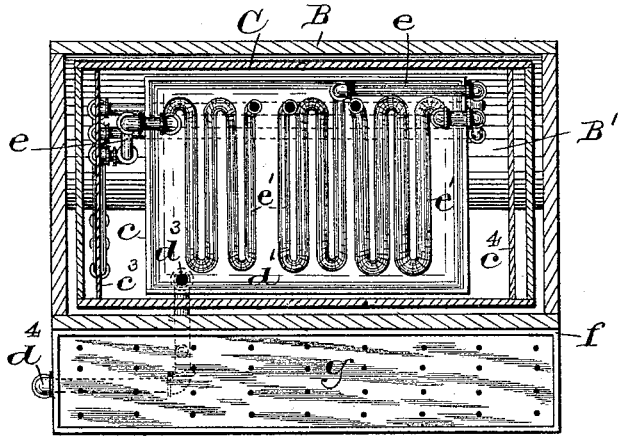

Fig. 6

WITNESSES:

Wm. H. Canfield, Jr.

S. Basil Hooper

INVENTOR

Rudolph Ledig,

BY Fred'k C. Haentzel, ATT'Y.

UNITED STATES PATENT OFFICE.

RUDOLPH LEDIG, OF NEWARK, NEW JERSEY.

BEER-COOLER.

SPECIFICATION forming part of Letters Patent No. 493,383, dated March 14, 1893.

Application filed June 27, 1892. Serial No. 438,072. (No model.)

To all whom it may concern:

Be it known that I, RUDOLPH LEDIG, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Refrigerators; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in refrigerators for beer or ale cooling purposes, and consists in the arrangement and combination of the refrigerator proper with a bar or counter, the refrigerating chamber provided with the liquor conveying pipes, and the improved form of sweat pan; also, the special arrangement of the inner walls, and small sections or plates communicating with ventilating holes or openings at the top to allow the cold air from the ice box to descend and to drive out the warm air in the other parts of the refrigerator from the same into the open air.

In the accompanying two sheets of drawings, in which are employed similar reference letters in each of the several views, to indicate corresponding parts,—Figure 1 is a front view of a bar in connection with which my improved form of refrigerator is adapted to be used. Fig. 2 is a rear view of the same, showing the manner of arranging the refrigerator in the back of and under the bar or counter; and Fig. 3 is an end view of the same. Fig. 4 is a vertical longitudinal section of the refrigerator, showing the arrangement of its inner parts. Fig. 5 is a vertical cross section taken on line y in Fig. 4, and Fig. 6 is a horizontal section taken on line x in said Fig. 4.

In said drawings, A represents the bar or counter, which may be of any size and is provided with a suitably curved panel A′, as will be seen from Figs. 1 and 3. In the recess or chamber formed by this arrangement of panel A′ in the bar or counter A, I place my improved form of refrigerator B, which is provided with the backwardly curved panel in the bar or counter, whereby an increased space for refrigerating purposes is obtained. The front of the refrigerator is provided with one or more doors b^2 giving access to the ice-box b' and with suitable doors b giving access to a refrigerating compartment b^3.

As will be seen from Figs. 4, 5 and 6, the outer wooden case of the refrigerator is preferably provided with an inner case C, preferably of metal, having a dividing wall or partition c separating the refrigerating compartment b^3 from the ice box b'. Upon this partition, I arrange my improved form of combined drip and sweat pan d, and in the ice box b' on both sides may be arranged the dividing shelves c' and c^2, upon which the cakes of ice are placed, as will be understood, said shelves being preferably provided with downwardly curved edges, as will be seen from Fig. 4.

Extending up from the refrigerating compartment b^3 are two side walls or partitions c^3 and c^4, secured to the inner side of the top of the ice box b'. In said top, behind said walls or partitions c^3 and c^4 are provided the suitable openings or holes b^4, the purpose of which will be described farther on.

The combined drip, and sweat pan d, as will be seen from Figs. 4 and 5, consists of an upper pan d' arranged upon the surrounding rim of a lower pan d^2. The upper pan d' has a hole d^3 from which the drip from the ice escapes into the lower pan d^2 and flows out of an opening therein into the waste pipe d^4, which passes out of the side of the refrigerator.

Leading from beneath the floor on which the bar and its refrigerator are placed, are suitable beer and ale conveying pipes e, which terminate in suitably arranged coils e' on the combined drip and sweat pan d, and from which extend pipes e^2 and e^3, the latter passing through the front of the ice box and being provided with faucets e^4, substantially as indicated in the figures of the drawings.

As will be seen from Figs. 3, 5 and 6, the ice box b' is narrower in cross section than the lower refrigerating compartment, whereby a

shelf f is formed upon which is arranged a suitable drip pan g. A pipe g' connects said pan with the waste pipe d^4.

The advantages of the present invention are many and are evident from the drawings. In the first place a suitable beer or ale cooler is the result, which is directly arranged under the bar or counter, thus dispensing with the use of the large and cumbersome refrigerators now used, thereby obtaining more floor space; second, it is in the most convenient place for the person dealing out the beverage, and the inclination or curved back produces a sufficient space; third, by the employment of the combined drip and sweat pan d, I have obtained this great advantage, that the sweat on the pipes or coils e' and especially that on the upper pan will form on the inner and lower side of the pan d' and on the inner and upper side of the pan d^2, and it will therefore accumulate in the chamber formed by the two pans and pass off through the pipe d^4, and fourth, the arrangement of the dividing walls or partitions c^3 and c^4, and the openings b^4 will allow the cold air generated by the ice to pass in the directions indicated by the arrows, shown in Fig. 4, to pass from the ice box b' to the refrigerating compartment b^3, and thereby drive the warm or hot air up behind the walls c^3 and c^4 and out of the openings or holes, as will be evident, and lastly, as has been previously stated, the shelves or dividing partitions c' and c^2, are arranged directly behind the doors b^2 in the refrigerator, thereby being admirably suited for the reception of the cakes of ice, thus avoiding the necessity of placing the heavy pieces of ice upon or against the cooling coils e', thus overcoming the danger of breaking or damaging said coils. By the arrangement of said shelves c' and c^2 the cold water from the ice runs over the edges of said shelves upon the coils e' and thence into the drip pan d and consequently cooling the liquor in said coils e'. Furthermore, the cold air passes downward in the direction of the arrows shown in Fig. 4, thereby cooling both the upper chamber b' and the lower chamber b^3.

Having thus described my invention, what I claim is—

1. A cooling and dispensing apparatus comprising therein a lower refrigerating chamber, and an ice box on the top thereof, shelves or partitions c' and c^2 in said ice box adapted to receive the pieces of ice, a dividing partition between said refrigerating chamber and the ice box, a cooling coil e' on said partition, pipes connecting with said coils for conveying the liquor to be cooled, pipes connected with said coil and faucets connected therewith, for drawing the liquor, all arranged substantially as and for the purposes set forth.

2. A cooling and dispensing apparatus comprising therein, a lower refrigerating chamber, and an ice box on the top thereof, shelves or partitions c' and c^2 in said ice box adapted to receive the pieces of ice, a dividing partition between said refrigerating chamber and the ice box, a combined drip and sweat pan d on said partition, a cooling coil e' arranged upon said pan, pipes connecting with said coil for conveying the liquor to be cooled, pipes connected with said coil and faucets connected therewith, for drawing the liquor, all arranged substantially as and for the purpose set forth.

3. A cooling and dispensing apparatus, said apparatus comprising therein, a lower refrigerating chamber and an ice box on the top thereof, vertical partitions c^3 and c^4, and air holes b^4 in the top behind said partitions, shelves or partitions c' and c^2 in said ice box adapted to receive the pieces of ice, a dividing partition between said refrigerating chamber and the ice box, a cooling coil e' on said partition, pipes connecting with said coil for conveying the liquor to be cooled, pipes connected with said coil and faucets connected therewith, for drawing the liquor, all arranged substantially as and for the purposes set forth.

4. A cooling and dispensing apparatus, comprising therein, the lower refrigerating chamber and an ice box on the top thereof, vertical partitions c^3 and c^4, and air holes b^4 in the top behind said partitions, shelves or partitions c' and c^2 in said ice box adapted to receive the pieces of ice, a dividing partition between said refrigerating chamber and the ice box, a combined drip and sweat pan d on said partition, a cooling coil e' arranged upon said pan, pipes connecting with said coil for conveying the liquor to be cooled, pipes connecting with said coil and faucets connected therewith, for drawing the liquor, all arranged substantially as and for the purposes set forth.

5. The combination, with the lower refrigerating chamber and an ice box on the top thereof, the pipes therein and faucets, of a combined drip and sweat pan d between said chamber and the ice box, a drain beneath the faucets, a drain pipe d^4 from said drip pan, and a drain pipe g' from the drain beneath the faucets, communicating with said pipe d^4, all arranged substantially as and for the purposes set forth.

6. The combination, with a stationary bar, of a separate and independent cooling and dispensing apparatus, comprising therein a lower refrigerating chamber and an ice box on the top thereof, said ice box having a closed top and air holes b^4 therein, and said closed top forming an air space with the upper side of the bar, and the back B′ of the apparatus forming an air space with the front or panel A′ of the bar, substantially as and for the purposes set forth.

7. A cooling and dispensing apparatus comprising therein, a lower refrigerating chamber, and an ice box on the top thereof, an ice-supporting shelf in said ice box, extending from the side of said ice box, a dividing partition below said ice-supporting shelf, both being arranged to form an air space between them

to conduct the cold air from the ice box to the lower refrigerating chamber, a cooling coil on said dividing partition, pipes connecting with said coil for conveying the liquor to be cooled, pipes connected with said coil and faucets connected therewith, for drawing the liquor, all arranged substantially as and for the purposes set forth.

In testimony that I claim the invention set forth above I have hereunto set my hand this 23d day of June, 1892.

RUDOLPH LEDIG.

Witnesses:
FREDK. C. FRAENTZEL,
WM. H. CAMFIELD, Jr.